

UNITED STATES PATENT OFFICE.

JAMES M. PIMENTEL, OF SAN FRANCISCO, CALIFORNIA.

IMPROVEMENT IN THE PROCESSES OF PRODUCING PHOTOGRAPHIC PICTURES.

Specification forming part of Letters Patent No. **151,620**, dated June 2, 1874; application filed November 29, 1873.

To all whom it may concern:

Be it known that I, JAMES M. PIMENTEL, of San Francisco, in the county of San Francisco and State of California, have invented an Improvement in Daguerreotypes and Ambrotypes; and I do hereby declare that the following is a full, clear, and exact description of the same, together with the best method which I have invented or discovered for that purpose.

My invention relates to an improvement in the process of taking ambrotypes; and consists in a novel manner of preparing and employing an amalgamated glass plate in place of the plate of plain glass now used for receiving the impression or object, the object being to give a softer tone and depth to the background, and impart a greater sharpness of outline and detail of the object, as will be described hereinafter.

In the use of my improvement in the process of taking ambrotypes, a plate of glass with one surface coated with amalgam is treated in the usual way to render the opposite surface sensitive, and is then placed in the camera, instead of the plate of plain glass, to receive the impression. After the impression is secured, the amalgam on the back of the plate beneath the figure is scraped off, leaving the reflecting-surface only beneath or under the background, and the back of the plate is covered with a coat of black varnish or equivalent material. The picture is then ready to be placed in the frame or case, where it is covered with a plate of colorless glass to protect it from dust and injury. The same ef-

fect may be produced by taking the impression on the ordinary plate of plain glass, and then, after removing the chemical coating forming the background, and covering the surface of the glass back of the figure with varnish, placing a mirror back of the plate in lieu of the background removed; but the former method is preferable, because of the greater simplicity and cheapness.

The result of this improvement is to give a soft and mellow tone and greater transparency to the background, and also produce more sharpness of outline in the figure or object, and thus produce a more finished and effective picture.

In this process of taking and manipulating ambrotypes, which I term "mirrortypes,"

What I claim, and desire to secure by Letters Patent, is—

The improvement in the process of producing photographic pictures upon glass, known as ambrotypes, consisting, first, in the employment of a plate having the surface opposite the one bearing the image silvered or provided with an amalgam, then removing such portions of the amalgam as correspond with the outline of the picture, and, finally, covering the whole of the surface with black or other opaque varnish, substantially as described.

In witness whereof I have hereunto set my hand and seal.

JAMES M. PIMENTEL. [L. S.]

Witnesses:

C. W. M. SMITH.

E. McQUESTEN.